THE NAUTILUS.

VOL. III.

OCTOBER, 1889.

No. 6.

RECENT ADDITIONS TO THE UNITED STATES SNAIL FAUNA.

BY H. A. PILSBRY.

[Note.—The plate illustrating this paper will accompany the concluding part in the next number of The Nautilus.]

PUPA calamitosa n. sp. Figs. 6, 7.

Shell minute, cylindrical, very blunt at apex, chestnut-colored; whorls 4½, the first one and one-half smooth, the following regularly costulate-striate, the costulae separated by spaces wider than themselves; last whorl abruptly turning forward, rounded beneath, encircled by a slight central constriction or furrow; aperture about one-third the total length of shell, rounded, truncated above, contracted within; peristome thin, expanded, without crest or callous thickening behind; columellar margin rather dilated; parietal wall bearing two entering lamellae, one arising near the termination of the outer lip, the other more deep-seated, elevated, entering less obliquely; columella with a strong white deep-seated obliquely entering fold; outer lip with two short white lamellae.

Alt. 1.70, diam. .80 mill.

Two trays of this tiny species are before me. One received from Henry Hemphill, collected near the mouth of San Tomas river, Lower California, the other collected by Orcutt near San Diego, Cal. Most specimens show the widening inward of the outer lip shown in the figure. Several specimens have only one lamella on the outer lip, and are rather larger than the typical form described, measuring 1.90 mill. alt. The second parietal lamella is usually much larger than the first, but in one or two specimens before me

this is not the ease. The umbilieal rimation terminates in a tiny depression, perhaps perforated, at the axis. The formula of denticles or folds would be (according to Dr. Sterki's scheme) AABDE or AABE. The species is of a decidedly different type from any other American Pupa. P. valifornica, hordcacea and other West coast forms being quite different. The former is closely allied to the group of decora, rowelli, corpulenta; the latter to P. rupicola and pellucida.

Another new Lower California *Pupa* will be described in the next number of The Nauthlus.

PATULA (PTYCHOPATULA) cæca Guppy.

This species has been noticed and briefly described by Dr. Dall in The Nautilus for July, 1889, p. 25. The specimens before me are from Hidalgo, Texas, collected by Mr. Singley. It is also in the Philadelphia Academy collection from Trinidad and Costa Rica, and Dr. Dall reports it from Florida. The Texas shells are 2 mill. high and about the same diameter. The Helix punctum of Morelet (1851) is very close to this species, probably identical; H. dioscoricola Ad. (1845) is also very similar, and, if the same, has priority.

As a section of the genns Patula I recently proposed the name Ptychopatula. The group includes those minute conoidal Neotropieal Helices, with acute thin lip, nearly circular or broad-lunate aperture, thin texture, opaque or nearly so, and generally delicately ribbed obliquely. The species are much more narrowly perforated than Patula or Microconus. Some of the species have been referred by authors to Acanthinula, others to Conulus, Pyramidula (a European section), etc. The type is *Helix cuca* Guppy. The following forms group around this type: H. punctum Morelet, H. dioscoricola C. B. Ad. (these three probably identical); H. ierensis Guppy, H. granum Strebel and Pfeffer, H. excoides Tate, H. plagioptycha Shutt. (these four very closely allied, the last three perhaps identical). The position of this section is next to Microphysa in the genus Patula. The dentition of H. caca has been figured by Binney. (Ann. N. Y. Acad. Sci., iii, p. 113, pl. 5, Fig. L, under the name "Helix ———. Costa Rica. Dr. W. M. Gabb."). It is similar to that of Microphysa vortex Pfr.

ZONITES (Guppya?) gundlachi Pfr.

This species is now for the first time recorded from west of the Gulf. Mr. Singley collected it at Hidalgo, Texas.

PATULA (Microphysa) incrustata Poey.

Found by Mr. Singley at Hidalgo, Texas. Heretofore recorded from Galveston and Corpus Christi. At the former locality I was unable to find the species when there several years ago; and Mr. Singley writes me that he did not get it at the last-named place, although special search was made.

My attention has been called to the fact that the name Microphysa is preoccupied. If a change is necessary, it is likely that we can use Thysanophora Strebel and Pfeffer for the section. It was proposed for Mexican species which are essentially similar to the West Indian forms.

PLANORBIS cultratus d'Orbigny. Figures 1, 2, 3.

This is a small form, flatter than any other United States species, very acutely keeled at the circumference; outer whorl convex above (considering the shell dextral), the spire slightly concave; almost perfectly flat beneath. There are about 4½ whorls on the largest specimen before me, very slowly and regularly widening (seen from beneath); the aperture is oblique, narrow, angular. The surface is finely marked by growth-striæ and has the faintest possible indications of spiral sulci near the peripheral keel. Diameter 4 mill.; altitude .65 mill. The specimens are from Hidalgo, Texas, sent by Mr. Singley. The species has been found in the Mexican State of Vera Cruz, in Guatemala and Venezuela. It was described from The insular form is decidedly larger than the Mexican shells, or than ours, measuring 9 mill, diam. For the bibliography of the species consult Crosse & Fischer, Moll. Mex. et l'Amer. Cent., vol. ii, p. 68; Strebel Beitrag zur Kenntniss der Fauna Mex., p. 46, (as "Planorbis nov. spec?"); and Orbigny's Mollusques de Cuba.

Mr. Ralph Tate in his article on Nicaragua shells (in Amer. Journ. Couch., vol. v, p. 158) calls this species "P. kermatoides." One of his specimens is before me. The real kermatoides Orb. is a much larger shell.

ANCYLUS excentricus Morelet. Figures 4, 5.

This is an Ancylas with more excentric apex than any heretofore known in the United States. The apex is one-fourth the length from the posterior end, and so strongly inclined to the right as to be about midway between a median line and the right border. The shell is horn-colored, fragile, oval, a trifle narrower behind; in outline the profile is convex in front of the apex, concave behind it. There are slight indications of the most delicate riblets radiating from the apex. Length 4, diam. 3, alt. 1.1 mill. Three specimens collected by Mr. Singley in Comal Creek at New Braunfels, Comal Co., Texas. The range of this species includes Guatemala, Nicaragua, Costa Rica. It has not been reported from Mexico. The identity of the Texas shells with the Central American is reasonably certain. I have compared specimens. Crosse and Fischer's figures are a trifle slenderer posteriorly, but undoubtedly represent this species.

(To be continued.)

CRITIQUES AND COMMENTS.

IN Mr. Carpenter's article, "The Shell-bearing Mollusca of Rhode Island," in the August Nautilus, page 45, he mentions the "Family Verticordiidae," and says "not represented in America." While the Verticordiidae are not shore shells, nor even shallow water forms, they cannot be regarded as exotic unless Mr. Carpenter's America is restricted to the littoral and laminarian zones of the main-land, and such a restriction would be absurd. Prof. Verrill reports Verticordia from off Martha's Vineyard and several species occur at various depths, from Vineyard Sound, southerly, along and off the coast of the Atlantic States to Florida and the Antillean region: and not only on the eastern side of North America, but on the Pacific as well, where Dall collected specimens in the vicinity of, or at, Catalina Island in the Santa Barbara Channel, California.

On page 46 occurs the following: "Family Chamidæ;" on this Mr. Carpenter comments "not represented in the U. S., excepting by fossils." This will be a queer surprise to the large number of collectors who have found the beautiful Chama arcinella Linn., not uncommon, on the beaches of Florida, and not so frequently the less attractive shells of the roughly sculptured C. macrophylla Linn., and the Chama florida of Lamarck (=C. sarda Rve.), to say nothing of other alleged species, some of which probably fall to the rear of those